

**PATHWAYS TO NEW ACADEMIC LIBRARY PRACTICES –  
SOUTH AFRICAN EXPLORATION TOWARDS 21<sup>ST</sup> CENTURY  
ACADEMIC RESEARCH SUPPORT**

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**ABSTRACT**

*This paper reviews the characteristics and skills of a future generation of research librarians as identified and reflected in findings of recent substantial surveys and studies. A South African joint university libraries project, funded by Carnegie Corporation [sic] of New York, has as its aim the strengthening of library support for academic researchers through the development of research librarians more knowledgeable about their subject domains and research processes, and differently and more highly skilled, than present subject reference librarians. Recent studies highlight the importance of new knowledge, skills and attitudes for the enhanced credibility of research librarians as partners on the academic research team.*

*Professional workplace realities in South African academic libraries, however, indicate that wide gaps in knowledge, skill and attitude, ascribed to a complex legacy of the past, must be narrowed before such partnerships become generally possible. The paper considers how such transformation might be achieved in a South African context, and proposes as yet untested but feasible options that might support and contribute towards establishing research partner librarians, thus also contributing to improving research throughput and productivity in academic institutions, a South African national imperative.*

**INTRODUCTION**

... if we were to design a system to address the needs of digital scholarly resources, it would certainly be different from the library... The[se] managers – be they called librarians or not – would be responsible for building and maintaining the multiple partnerships with scholars, learned societies, content creators, publishers and, above all, with each other across the globe, that would support persistent access to high-quality research resources.<sup>1 (p20)</sup>

This paper addresses the challenge of “retro-fitting” professional librarians for increased credibility. A joint Carnegie Corporation-funded Research Libraries Consortium (RLC) project,<sup>2</sup> in place at the Universities of Cape Town, KwaZulu-

Natal, and the Witwatersrand, Johannesburg (“Wits”), has focused, in 2006-2009, on developing three interdependent elements of research support at the three participating institutions. These elements are:

1. a Research Portal;
2. the Research Commons (a physical space particularly for the ‘one stop’ support of young researchers); and
3. a cohort of mid-career Research Librarians more knowledgeable about the research process in different disciplines, and better skilled in collaborative and support activities with researchers, than their subject/reference librarian counterparts. By mid 2009, 36 librarians will have each participated in a two-week local residential Librarians’ Academy and 15 of these will have further participated in internship programmes for six to eight weeks each at major university libraries in the U.S.A. Collectively these “Carnegie research librarians” have formed, at each institution, a core team for developing a new, higher level support relationship with graduate research students and academic faculty researchers.

### DO RESEARCH LIBRARIANS GO IN DEEP ENOUGH?

When research librarians surf the web, do they surf in the deep sea swell of the disciplines they serve, browsing the online or print journals, following the breaking news of research and publications on relevant websites? Or do many, as Mann<sup>3</sup> suggests, stop with the known facts, easily retrieved by applying competent search and retrieval techniques to the vast range of resources, almost entirely online, that are their daily stock in trade in all academic and research libraries?<sup>3 (p 4-5)</sup>

(The present author has anecdotal evidence that some South African librarians are no different. Confronted with reading Bill Bryson’s popular history of science, *A Short history of nearly everything*,<sup>4</sup> which some RLC Academy participants found a challenging task, one queried, “Why do we have to read something we know nothing about?”)

Mann argues a strong case for applying the sophisticated skills of the cataloguer to the research information environment, and for the research librarian to be aware of, and follow up on, “relationships, interconnections, contexts and integration.” Referring to the differences he perceives between “scholarship” and “quick information seeking,” he maintains that

Getting a researcher efficiently *from* what he or she asks for *to* what is available in a research library is a much more complex operation than most librarians realise; it is also more complex than too many library managers themselves seem to understand. Most of it cannot be done remotely through searching the open internet, no matter how much under-the-hood programming underlies the utopian ‘single search box’.<sup>3 (p 4)</sup>

## ASERL COMPETENCIES

The Association of Southeastern Research Libraries (ASERL) Education Committee developed and approved in 2000 five comprehensive competencies for research librarians,<sup>5</sup> stating that “the research librarian

1. develops and manages effective services that meet user needs and support the research library’s mission;
2. supports cooperation and collaboration to enhance service;
3. understands the library within the context of higher education (its purpose and goals) and the needs of students, faculty, and researchers;
4. knows the structure, organization, creation, management, dissemination, use, and preservation of information resources, new and existing, in all formats; and
5. demonstrates commitment to the values and principles of librarianship.”

These statements, each enhanced with detailed activities and attributes, profile a research librarian with intellectual curiosity, flexibility, adaptability, persistence and the ability to be enterprising; with excellent communication skills, and personal commitment to lifelong learning and career development. Such a librarian would go, intellectually as well as technologically, beyond the basics of competent information-seeking for known facts, and apply high level skills and abilities that would include

- professional competence in the traditional fields of metadata and the newer fields generated by digital librarianship and data curation;
- broad and specialised knowledge of a domain, and the initiative to update that knowledge proactively and to think laterally across domains; and
- the will and initiative to engage with researchers in their domains.

## WHAT DO RESEARCHERS WANT?

In the years 2006-2009, five major studies on research libraries and librarians have collectively presented challenges for far-reaching change in the abilities, attitudes, behaviours and service provision activities of academic research librarians.

### ***1. Ithaka’s 2006 Studies of Key Stakeholders in the Digital Transformation in Higher Education***<sup>6</sup>

This study reported on large scale surveys undertaken to study attitudes towards transition to an electronic environment. The report shows that faculty increasingly valued electronic resources but perceived themselves to be *decreasingly* dependent on the library for their research and teaching<sup>6 (p4-5)</sup> and although scholars reported

general respect for libraries and librarians, “the library is increasingly disintermediated from their actual research process” – in other words, researchers no longer used the library as a gateway to information.<sup>6 (p30)</sup>

The Ithaka studies have tested three “roles” of the library: purchaser, archive and gateway.<sup>6 (p5)</sup> The role as purchaser was most highly rated by faculty, whereas that of gateway has varied more widely and fallen over time, as tables in the report reflect.<sup>6 (p6 8-12)</sup> Responses also varied significantly by discipline – more than 80% of faculty in humanities generally saw the librarian’s role as having greater continuing importance than did social scientists (round 70%) or scientists (60%), and within these very broad groupings again, there was substantial variation (e.g. between sociologists and economists).<sup>6 (p 6)</sup>

Librarians’ 2006 perceptions of their own roles were very different from faculty perceptions: over 90% of librarians listed their role of gateway for faculty as very important and almost as many expected it to remain very important in five years. The authors pose the question that, if librarians viewed the gateway function as critical but faculty in certain disciplines found it to be declining in importance, “how can libraries, collectively or individually, strategically align the services that support the gateway function?”<sup>6 (p6 11-12)</sup> The report also concludes that different disciplines have dramatically different needs, interests and priorities...a ‘one size fits all’ solution will not, in fact, fit all.<sup>6 (p30-31)</sup>

## **2. Researchers’ Use of Academic Libraries and their Services**<sup>7</sup>

This 2007 British report listed the seven roles of research librarians that were most highly ranked out of 13 options by researchers, and identified as likely for five years into the future:

1. Custodian of print-based and digitised archives and special collections. (72%);
2. Managers of institutional repositories of digital information (61%);
3. Administration (purchase and delivery) of information services (59%);
4. Subject based information expert (core role: 46%; ancillary role: 33%).

More researchers in arts, humanities and social sciences valued the subject-based expertise of librarians than did researchers in the sciences. A significant, though smaller proportion of researchers envisaged subject-based information experts from the library being embedded in departments or research groups, either as a core or ancillary role. Some librarians surveyed saw librarians in a future role working in the “subject communities” they served, working with researchers on projects, or in an advisory role. The report suggests that “The role and location of subject and research librarians is clearly a matter that needs to be discussed further between the library and research communities... The researchers we talked to frequently expressed the opinion that their subject librarian fulfilled a vital role in their working lives.”<sup>7 (p43-46)</sup>

Other top roles of research librarians were:

5. Teacher of information literacy and related skills (42% core, 39% ancillary);
6. Manager of the vast datasets generated by e-research (33% core, 27% ancillary);
7. Technology specialist facilitating electronic access to information resources (34% core, 37% ancillary).

The survey also showed that some researchers thought librarians should carry out other more technical support functions; as reported above, from the Ithaka study, the research librarians surveyed did not always agree with researchers, and the roles that they saw for themselves <sup>7 (p46-56)</sup> included:

- providing library-based advice or formal training to researchers; and
- providing library-based skills development for researchers (including guiding researchers through the process from simple information management to information dissemination, but recognising that this may be perceived as an intrusion on the research student-supervisor relationship).

### **3. NYU 21<sup>st</sup> Century Library Project <sup>8</sup>**

In this 2007 study, conducted for New York University Libraries, expectations of the roles of research librarians are embedded throughout the report. Most researchers expressed high expectations of librarians and the compilers of the report felt it was difficult to identify the core priorities that best served the most people. However, researchers did not always express confidence in the specialist subject knowledge of the librarian:

- “I am skeptical that a librarian would actually be able to select a set of books that would be more useful to me than one selected by another computer scientist;”
- “I often feel the suggestions of librarians are too broad.”<sup>8 (p20-21)</sup>

### **4. No Brief Candle: Reconceiving Research Libraries for the 21<sup>st</sup> Century <sup>9</sup>**

This Council on Library and Information Resources (CLIR) report comprises proceedings of a 2008 symposium and a “series of provocative essays.”<sup>9 (p v)</sup>

Smith highlights six trends in the academic research environment which she believes are likely to shape scholarship in the next decades, and therefore reflect something about the resources scholars will use, how they will use them and in each case what the implications for research libraries may be:

- ascendance of science;
- development of digital humanities;
- emphasis on process over product;
- “mobile and ubiquitous” computing;

- data deluge; and
- rising costs and changing funding models – so that the library on campus must “continuously demonstrate its value.”<sup>10</sup> (p4-18)

Luce,<sup>10</sup> writing about the emergence of e-research, believes that the characteristics of e-science (i.e. working on problems that have only become solvable in recent years with improved data collection and data analysis capabilities) fundamentally alter the way in which scientists carry out their work and “will require a corresponding change in the ways in which libraries serve scientists’ needs.”<sup>10</sup> (p42) He describes key roles for the research library, indicating that “the level of knowledge and engagement required goes well beyond knowledge of the literature – requires being a trusted member of the community with recognised authority in information-related matters. This new paradigm entails shifting library foci from managing specialized collections to emphasizing proactive outreach and engagement.”<sup>10</sup> (p44) Changes in research libraries must be driven by and reflect the needs of the research communities they seek to support, and the challenges facing research libraries are “to articulate and advance our role and unique capabilities into the virtual laboratory environment.”<sup>10</sup> (p48)

### ***5. Scholarly Information Practices in the Online Environment***<sup>11</sup>

This OCLC Research report was published in January 2009. The authors present in depth analyses across subject domains of the scholarly information activities of searching, collecting, reading, writing, collaborating and the so-called cross-cutting scholarly “primitives” of monitoring, note-taking, translating and data practices. They have thus “derived a framework of scholarly information activities ... to serve as points for comparisons across domains ... to advance understanding of the information work of scholarly communities.”<sup>11</sup> (p6-7)

In an extensive table at the end of the report, the authors highlight “potential collaborative or shared services.” This table effectively offers a checklist for developing enhanced services in the research library, many of which also feature, explicitly or implicitly, in the earlier studies described above. As the authors suggest, “Opportunities for development are continually presenting themselves, while many longstanding challenges remain.”<sup>11</sup> (p37-42)

## **THE SOUTH AFRICAN RESEARCH ENVIRONMENT**

Complementing points made in the studies described above, Andrew Kaniki, Executive Director, Knowledge Fields Development at the South African National Research Foundation (NRF), has recently highlighted new areas in the research environment in South Africa in which research librarians (and most specifically the RLC project participants) should become informed and proactively engaged:

- Issues related to South Africa's international research competitiveness, reflected in ISI citation ranking, analysis and interpretation; measuring and providing evidence of progress and/or regression in international competitiveness;
- Use of *ISI Web of Knowledge* and *Scopus* for collection and interpretation of indicators, including citation metrics that are discipline specific;
- Provision of support for the NRF application processes (researcher rating system & grant applications);
- Provision of information and guidance on who is involved in the system (nationally and internationally);
- Identification of potential reviewers (for NRF rating of researchers & grant proposals);
- Establishing a liaison with institutional Research Offices;
- Engaging with pre-evaluation of research outputs – especially books (checking accuracy of data reported, especially bibliographic information);
- Facilitation of appropriately completed submissions for Department of Education research publication subsidies;
- Assisting researchers with research integrity – data sources; references, etc.;
- Becoming engaged in the field of scientific data preservation and management.<sup>12</sup>

### ***Foundations and future directions for South African academic and research librarians***

Librarians in South Africa attain first level professional graduate qualification by one of three four-year degree paths which incorporate widely differing combinations of academic, professional and technological course content and structure of majors. Entry-level and middle-level cohorts of professional librarians in academic and research libraries move to post-basic LIS graduate studies most commonly through coursework Honours and Masters degree programmes, in professional rather than academic studies, such as management and information/knowledge management. It is apparent, for example from applications for more senior posts at Wits as a typical South African academic library, that few librarians return to an academic subject discipline to complete a Masters degree by dissertation. Fewer still embark on professional LIS studies after obtaining a PhD in an academic discipline, as Rentfrow<sup>13</sup> describes of herself.

South African LIS graduates acquire theoretical knowledge in courses *inter alia* on information studies, and knowledge and information management. In the workplace this knowledge is not always internalised, nor is sufficient subject domain knowledge or high level technological knowledge retained or transferred from undergraduate studies, to support academic subject librarianship, digital librarianship or academic research for higher degrees. The general absence of substantial underpinning knowledge for effective research collection development and

high level professional practice in support of scholarly information activity, presents a major challenge to academic research library managers. This also points to South African professional LIS education as a legacy product of South African education in general, particularly education for black South Africans, during half a century of apartheid philosophy.

Major academic institutions in South Africa aspire to move higher in the international 'league tables' of universities by increasing their research output and the status of their researchers. Studies such as those analysed above show it is critically important that effective research librarians understand the widely different needs and approaches to research and information resource access expressed by faculty in different disciplines; this is an area of knowledge and experience beyond academic subject knowledge in itself. These studies highlight the very considerable gap between the skills and activities of South African research libraries and librarians in support of institutional research activities, compared with those reflected internationally.

A number of the authors in the Council on Library and Information Resources report have persuasive views on new directions for LIS curriculum content and new forms of basic professional education for future research librarians. Rentfrow has expressed frustration that "discussion on digital humanities and thematic research collections is left ... to advanced classes concentrating on digital librarianship. The topics should be addressed in any class with students possibly interested in working in a research library." She offers extensive proposals for completely restructuring design of programmes and research library services for digital humanities: "What is needed for the research library of the future are librarians-scholars prepared and trained by degree programs that require rigorous scholarship, publications and teaching as part of training. One model might be a separate track designed specifically for academic librarians..."<sup>13</sup> (p62-64)

Luce has made the same points for provision of research library services for rapidly expanding e-research and e-science.<sup>10</sup> (p43) Dillon<sup>14</sup> has suggested a pedagogical model built on design and project experiences, a studio-based curriculum that builds the skills and knowledge required to participate intelligently in the changes affecting libraries. This would include working with projects involving real clients, a testing ground for ideas and potential solutions, providing the emerging professional with opportunities to hear from the field, work with an expert, and offer concrete responses. "Coupled with a strong theoretical education in human information interactions, we would educate a class of professionals equipped to grapple with the ill-structured problems faced by academic libraries at this time."<sup>14</sup> (p56-57)

These proposals do not, however, address the problem of "retro-fitting" early or mid-career professionals. Without advanced knowledge and new skills to support academic research trends toward e-research, e-science and digital commons, and new practices such as data curation and access to complex digital resources, the gap will widen and librarians in South African academic research institutions will be in danger of becoming less rather than more able to engage with researchers.

Beyond numerous CPD short course offerings, mostly in the form of sporadic workshops and symposiums, there is no South African framework, outside of the Master's and PhD degrees, for recognised post-basic specialisation. The question to be asked is therefore, where and how do professional academic librarians expect to acquire knowledge in a discipline-specific domain, or high level technological knowledge and skills for digital research library practice as described above, and thus move towards credibility as partners in the research enterprise?

Recognising this as a crucial question, the Carnegie RLC Librarians' Academy was developed as a post-basic academic initiative for meeting the challenge for intellectual development of research-skilled and competent professional academic librarians in South Africa. During the two-week programmes in 2007 and 2008, participating librarians were exposed to more than 30 high level academic presentations on research in all its forms, from a wide range of disciplines. They also met in daily work groups, including reading circles, to discuss pre-selected articles on what Rentfrow has called "big ideas,"<sup>13 (p63)</sup> and were each required to propose and write up, with some counselling, a relatively short research project for potential publication in a South African professional journal.<sup>15</sup> On their return to their home institutions, the Academy participants, anchored in the Research Commons, have formed a core for future research librarian practice.

South African academic and research library managers are challenged to provide library support for high level academic research, substantially in a digital environment, or they run the risk of becoming irrelevant to the research endeavour: "I have far more specialist knowledge than the librarians. As long as the library continues to provide the materials that I need for research and teaching, I am more than capable of finding what I need, either in print or electronically."<sup>16</sup>

The Carnegie RLC project, and the Librarians' Academy in particular, have made explicit the need for graduating librarians to be far better educated to meet these high level needs of academic researchers. Given the intake of most South African library schools, this may be a generally unrealistic expectation at the first level of qualification.

### *New pathways to CPD for South African research librarians*

Extrapolating from the model of the Academy programme and discussions arising from it, other possibilities arise. Dillon's "studio" approach referred to above suggests an application for innovative post-basic CPD. Other potential interventions, ranging from what can be embedded in the institutional workplace, to proposed changes at a national qualification framework level, include:

- to implement on-the-job guided professional self study, reading programmes ("reading circles") and writing circles, to instil initially a greater awareness of and critical debate around current developments and issues in research libraries;

- to design and implement coaching or shadowing programmes within or between university libraries, to spread the scarce skills as widely as possible; to attract visiting international consultants to do this;
- to recruit and employ, possibly on medium term contract, a parallel band of “new” librarians to work in research libraries side by side with the existing traditional subject librarians, specifically to engage with researchers and coach new skills;
- to engage institutionally with academic staff across disciplines to create and teach customised in-house short course programmes for upgrading knowledge and high level skills. These might include introductions to broad and narrow disciplines and discipline-specific research issues, and skills such as statistics and dataset management. Active participation in such courses might be a performance management requirement;
- to negotiate, as a performance management requirement, full participation by all professional librarians in institutional courses on research methodology which target graduate students;
- to incorporate the acquisition and application of knowledge for all professional academic and research librarian posts as a performance management requirement. This might be an annual quota of events including exposure to subject knowledge through reading appropriate source material; attending public or in-faculty research presentations; subscribing to and participating in relevant interactive professional networking websites such as electronic discussion lists, blogs, etc.; presenting at professional meetings; and publishing in the professional literature;
- In the area of formal qualifications at a post-basic level, to work with appropriate South African qualifications bodies, together with academic libraries as employers, the library schools and the Library and Information Association of South Africa (LIASA) to develop a graduate LIS specialist qualification, to be accommodated in the Higher Education Qualifications Framework.<sup>17</sup> Specialisation curricular clusters for advanced academic subject and research information work, could be compiled.
- To encourage research librarians to acquire PhD degrees. Those who have PhDs have been identified as playing an important role in raising the quality of academic library support for institutional research: for example, echoing Rentfrow,<sup>13</sup> the Dean of Research at the University of the Western Cape told the RLC Academy, “many more of our librarians must themselves come to hold PhDs ... good specialist research librarians get PhDs” and “can do almost everything a good supervisor can do for a PhD student.”<sup>18</sup>
- to design new research librarian job specifications for academic libraries and promote buy-in from all institutions, for example through pressure from local and national professional academic library bodies, following the recommendation of the CLIR:

- University administrators and librarians should consider creating new training and career paths for professionals going into the area of scholarly communication. New leadership programs need to be developed that reflect the rise in collaborative research and integrate support services such as those provided by research libraries into the process and methodologies of research.<sup>9 (p11)</sup>

Academic library managers have a vital role to play in the retrofitting endeavour. Identifying and setting performance goals for acquiring new knowledge and new skills, and embedding these in a supportive and challenging work environment is one area of responsibility; another is identifying and promoting, within the academic institution, new collaborative and partnership roles for research librarians. Relationship building at individual, school and faculty level is the ongoing responsibility of every research librarian, but it is the library director who has the greatest peer influence in institutional academic and research management circles, and must therefore “walk the talk”.

Finally, and controversially, it has been proposed (as for example in the studies referred to above) that professional LIS qualifications should not be mandatory for appointing to research librarian specialist posts, and that professional and technological qualifications or skills can be added as required on the job:

Hiring only staff with a master’s of library and information science (MLIS) degree is unlikely to bring in the breadth of skill and experience that is needed... We need new career paths for people who want to work in academic libraries, and we need the means to support them.<sup>9 (p3)</sup>

The successful research library of the future will have a staff composed of many types of librarians... Scholars with PhDs, MLIS-holding librarians, hybrids with both degrees, and others with neither degree will all have a role to play. Some will be housed in the library, some in academic departments, and some in teaching centers. Some will be unmoored consultants.<sup>13 (p65)</sup>

## CONCLUSION

This paper has used the argument of several recent major international studies to highlight significant changes that must take place for South African academic research librarians to establish institutional credibility and an internalised understanding of the research process. The intellectual and collaborative relationship between research librarians and the academic researchers they should support, in order to remain relevant within the research environment, has yet to be institutionally established in most South African university libraries, and new, high level skills sets need to be acquired, or implemented from the knowledge base of post graduate theoretical studies, before this can realistically be achieved.

The Carnegie RLC project Librarians' Academy has provided an intensive but relatively short term and narrow-based model emphasising that academic research librarians should proactively work to acquire the scholarly habits of the academic researcher, and read, identify and explore research issues, writing these up for peer reviewed presentation and publication as routine ongoing behaviours. As indicated above, the Academy has delivered, through two iterations, a base of over 30 academic librarians as a seed bed in their home institutions. Wider and more ongoing interventions are required and some possibilities, largely workplace supported CPD, have been outlined. No interventions can however have a lasting effect unless these are internalised:

rather *more* is needed than for LIS professionals to promote their expertise more widely if they to [sic] aspire to involvement at the strategic and policy-making level. For many in the profession this is likely to entail the cultivation of *new attitudes* and the learning of new kinds of skills: *and opening up to new ways of thinking...* [present author's italics]<sup>19</sup>

The burning question remains:

But how do we balance a conservative, risk-averse nature with the need to respond to a changing environment... we need to experiment and develop opportunities for work in new sectors or new alignments with different organizations.<sup>9 (p2)</sup>

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